

7.0 Opportunities and Recommendations

7.1 Summary of Opportunities

The Merger Proceeding. At the present time there is a docket before the New Hampshire Public Utilities Commission (DW 02-126) in which Pennichuck and Philadelphia Suburban ask that their merger be approved. The City of Nashua has intervened in that proceeding. With respect to this docket the City can:

5. Recommend to the NH PUC that the merger be approved.
6. Recommend the merger not be approved.
7. Recommend that the merger be approved with conditions.
8. Make no recommendation on the merger.

Opportunities. The City has a number of opportunities with respect to the water system that are independent of the current merger activity which include:

1. Accept the outcome of the current NH PUC proceeding.
2. Accept the outcome of the current NH PUC proceeding and continue oversight of the merged Pennichuck Corporation through participation in future PUC proceedings such as rate cases.
3. Take Pennichuck Water Works, Inc. utilizing the procedures in New Hampshire Revised Statutes Annotated Chapter 38.
4. Create a Merrimack River Regional Water Authority and take Pennichuck Water Works and Pennichuck East Utilities.
5. Take action independently of the opportunities above to preserve and protect the Pennichuck Brook Watershed by a combination of land use regulation and property acquisition.
6. Explore creating a mechanism through which watershed land is donated to a public land trust for preservation of the watershed's protection and open space purposes while preserving its use for water supply and creating a tax advantage for Pennichuck.

7.2 Discussion of Opportunities

Three of the opportunities deserve further discussion: the conditions to the merger, the acquisition of Pennichuck Water Works and the formation of a regional water authority.

7.2.1 Acquisition of Pennichuck Water Works

As discussed in Section 6, the City of Nashua's direct interest in a water supply system is the system that services the City itself. A proceeding under RSA 38 should properly be limited to the portion of PWW located within the City limits plus those mains and facilities outside the City that are dependent on the Pennichuck Water Treatment Plant for a source of water supply.

A preliminary financial evaluation was conducted to determine the benefits of City ownership of PWW versus Philadelphia Suburban (PSC) ownership. In general public ownership is financially beneficial to customers due to the fact that public entities do not pay taxes or dividends and can raise capital at much lower rates than investor owned utilities. Furthermore the public entity has the opportunity to build equity in the utility over time as the debt is paid down.

The benefits of public ownership are demonstrated in a preliminary comparative analysis of PWW's cash flow under City and PSC ownership. Tables 7.1 and 7.2 present a summary of a twenty year cash flow pro-forma for City and PSC respectively. The analysis assumes a hypothetical purchase price of \$100 million and the anticipated capital improvements program generated herein for both entities. Operating revenues and expenses are the same for both scenarios with the exception of the additional management allocation from PSC Corporate. Appendix I presents additional information relative to the analysis. It should be noted that this is a preliminary evaluation and additional efforts are necessary to refine the analysis. Nevertheless the general comparative trends are demonstrated. Excluding inflation, rate increases under City ownership are projected to be 28% over the 20 year projection period. Rate increases under PSC ownership are projected to be 49.5 %, almost twice the City scenario. The fact that the City can obtain capital for less than PSC is a key driver in this analysis. The PWW system has a high capital requirement associated with the improvements and replacement that are required and under City ownership these capital needs can be met at a lower cost to the customers.

Table 7.1
SUMMARY OPERATING RESULTS
Publicly Owned Utility - \$100,000,000

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
OPERATING REVENUES - Sales of Water	\$ 14,587,781	\$ 15,789,718	\$ 17,100,282	\$ 18,529,720	\$ 20,089,247	\$ 21,434,850	\$ 22,876,267	\$ 23,804,147	\$24,770,149	\$25,775,929
OPERATING REVENUES - Other	368,371	371,402	374,487	377,628	380,825	370,880	360,993	351,166	341,400	331,696
TOTAL OPERATING REVENUES	\$ 14,956,152	\$ 16,161,120	\$ 17,474,769	\$ 18,907,348	\$ 20,470,072	\$ 21,805,730	\$ 23,237,260	\$ 24,155,313	\$25,111,549	\$26,107,625
OPERATING AND MAINTENANCE EXPENSES	\$ 6,790,128	\$ 7,036,018	\$ 7,290,970	\$ 7,555,324	\$ 7,829,433	\$ 8,113,666	\$ 8,408,399	\$ 8,714,027	\$ 9,030,959	\$ 9,359,617
NET REVENUES	\$ 8,166,024	\$ 9,125,102	\$ 10,183,799	\$ 11,352,024	\$ 12,640,639	\$ 13,692,064	\$ 14,828,861	\$ 15,441,286	\$16,080,590	\$16,748,008
DEBT SERVICE	\$ 2,519,930	\$ 2,519,930	\$ 8,890,992	\$ 9,390,992	\$ 9,390,992	\$ 11,346,976	\$ 12,846,976	\$ 13,146,976	\$13,146,976	\$13,146,976
BALANCE AFTER DEBT SERVICE	\$ 5,646,094	\$ 6,605,172	\$ 1,292,807	\$ 1,961,032	\$ 3,249,647	\$ 2,345,088	\$ 1,981,885	\$ 2,294,310	\$ 2,933,614	\$ 3,601,032
NON-OPERATING (REVENUES)/EXPENSES	\$ 2,436,338	\$ 2,542,645	\$ 1,292,807	\$ 1,961,032	\$ 2,959,300	\$ 2,345,088	\$ 1,981,885	\$ 2,294,310	\$ 2,933,614	\$ 3,601,032
NET SURPLUS (DEFICIT)	\$ 3,209,756	\$ 4,062,527	\$ -	\$ -	\$ 290,347	\$ -	\$ -	\$ -	\$ -	\$ -
PERCENT DEFICIENCY	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
RATE INDEXING FOR INFLATION	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%
RATE INCREASE ABOVE INFLATION	2.000%	5.000%	5.000%	5.000%	5.000%	3.000%	3.000%	0.000%	0.000%	0.000%
TOTAL ANNUAL RATE INCREASE	4.500%	7.500%	7.500%	7.500%	7.500%	5.500%	5.500%	2.500%	2.500%	2.500%
CUMULATIVE RATE INCREASE	4.500%	12.000%	19.500%	27.000%	34.500%	40.000%	45.500%	48.000%	50.500%	53.000%
DEBT SERVICE COVERAGE - Required	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
DEBT SERVICE COVERAGE - Achieved	3.24	3.62	1.15	1.21	1.35	1.21	1.15	1.17	1.22	1.27

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
OPERATING REVENUES - Sales of Water	\$ 26,823,215	\$ 27,913,811	\$ 29,049,597	\$ 30,232,537	\$ 31,464,679	\$ 32,748,160	\$ 34,085,211	\$ 35,478,159	\$36,929,433	\$38,441,565
OPERATING REVENUES - Other	322,055	312,478	302,966	293,520	284,142	274,433	264,794	255,226	245,730	236,308
TOTAL OPERATING REVENUES	\$ 27,145,270	\$ 28,226,289	\$ 29,352,563	\$ 30,526,057	\$ 31,748,821	\$ 33,022,593	\$ 34,350,005	\$ 35,733,385	\$37,175,163	\$38,677,873
OPERATING AND MAINTENANCE EXPENSES	\$ 9,700,449	\$ 10,053,909	\$ 10,420,470	\$ 10,800,630	\$ 11,194,900	\$ 11,603,813	\$ 12,027,918	\$ 12,467,792	\$12,924,029	\$13,397,247
NET REVENUES	\$ 17,444,821	\$ 18,172,380	\$ 18,932,093	\$ 19,725,427	\$ 20,553,921	\$ 21,418,780	\$ 22,322,087	\$ 23,265,593	\$24,251,134	\$25,280,626
DEBT SERVICE	\$ 14,409,624	\$ 14,409,624	\$ 14,409,624	\$ 14,409,624	\$ 14,409,624	\$ 16,024,201	\$ 16,024,201	\$ 16,024,201	\$16,024,201	\$16,024,201
BALANCE AFTER DEBT SERVICE	\$ 3,035,197	\$ 3,762,756	\$ 4,522,469	\$ 5,315,803	\$ 6,144,297	\$ 5,394,579	\$ 6,297,886	\$ 7,241,392	\$ 8,226,933	\$ 9,256,425
NON-OPERATING (REVENUES)/EXPENSES	\$ 3,035,197	\$ 3,762,756	\$ 4,171,369	\$ 4,340,071	\$ 4,515,994	\$ 4,699,451	\$ 4,890,769	\$ 5,090,291	\$ 5,298,371	\$ 5,515,383
NET SURPLUS (DEFICIT)	\$ -	\$ -	\$ 351,100	\$ 975,732	\$ 1,628,303	\$ 695,128	\$ 1,407,117	\$ 2,151,101	\$ 2,928,562	\$ 3,741,042
PERCENT DEFICIENCY	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
RATE INDEXING FOR INFLATION	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%
RATE INCREASE ABOVE INFLATION	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
TOTAL ANNUAL RATE INCREASE	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%
CUMULATIVE RATE INCREASE	55.500%	58.000%	60.500%	63.000%	65.500%	68.000%	70.500%	73.000%	75.500%	78.000%
DEBT SERVICE COVERAGE - Required	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
DEBT SERVICE COVERAGE - Achieved	1.21	1.26	1.31	1.37	1.43	1.34	1.39	1.45	1.51	1.58

Table 7.2
SUMMARY OPERATING RESULTS
Investor Owned Utility

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
OPERATING REVENUES - Sales of Water	\$ 16,689,399	\$ 20,273,642	\$ 21,462,548	\$ 22,337,775	\$ 23,248,838	\$ 25,774,606	\$ 26,830,612	\$ 27,930,308	\$29,075,592	\$30,268,443
OPERATING REVENUES - Other	168,371	171,402	174,487	177,628	180,825	184,080	187,393	190,766	194,200	197,696
TOTAL OPERATING REVENUES	\$ 16,857,770	\$ 20,445,044	\$ 21,637,035	\$ 22,515,403	\$ 23,429,663	\$ 25,958,686	\$ 27,018,005	\$ 28,121,074	\$29,269,792	\$30,466,139
OPERATING AND MAINTENANCE EXPENSES	\$ 7,111,496	\$ 7,368,634	\$ 7,635,228	\$ 7,911,631	\$ 8,198,210	\$ 8,495,350	\$ 8,803,442	\$ 9,122,896	\$ 9,454,139	\$ 9,797,609
NET REVENUES	\$ 9,746,274	\$ 13,076,410	\$ 14,001,807	\$ 14,603,772	\$ 15,231,453	\$ 17,463,336	\$ 18,214,563	\$ 18,998,178	\$19,815,653	\$20,668,530
DEBT SERVICE	\$ 7,941,225	\$ 7,941,225	\$ 7,941,225	\$ 7,941,225	\$ 7,941,225	\$ 12,099,067	\$ 12,099,067	\$ 12,099,067	\$12,099,067	\$12,099,067
BALANCE AFTER DEBT SERVICE	\$ 1,805,049	\$ 5,135,185	\$ 6,060,582	\$ 6,662,547	\$ 7,290,228	\$ 5,364,269	\$ 6,115,496	\$ 6,899,111	\$ 7,716,586	\$ 8,569,463
NON-OPERATING (REVENUES)/EXPENSES	\$ 4,191,121	\$ 5,239,400	\$ 5,570,942	\$ 5,809,579	\$ 6,078,614	\$ 6,295,264	\$ 6,610,804	\$ 6,937,963	\$ 7,277,241	\$ 7,629,159
NET SURPLUS (DEFICIT)	\$ (2,386,072)	\$ (104,215)	\$ 489,640	\$ 852,968	\$ 1,211,614	\$ (930,995)	\$ (495,308)	\$ (38,852)	\$ 439,345	\$ 940,304
PERCENT DEFICIENCY	16.683%	0.584%	0.000%	0.000%	0.000%	4.024%	2.052%	0.154%	0.000%	0.000%
RATE INDEXING FOR INFLATION	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%
RATE INCREASE ABOVE INFLATION	20.000%	20.000%	2.000%	0.000%	0.000%	7.500%	0.000%	0.000%	0.000%	0.000%
TOTAL ANNUAL RATE INCREASE	22.500%	22.500%	4.500%	2.500%	2.500%	10.000%	2.500%	2.500%	2.500%	2.500%
CUMULATIVE RATE INCREASE	22.500%	45.000%	49.500%	52.000%	54.500%	64.500%	67.000%	69.500%	72.000%	74.500%

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
OPERATING REVENUES - Sales of Water	\$ 32,906,826	\$ 34,261,755	\$ 35,673,359	\$ 37,144,101	\$ 38,676,550	\$ 38,462,480	\$ 40,047,818	\$ 41,699,841	\$43,421,447	\$45,215,657
OPERATING REVENUES - Other	201,255	204,878	208,566	212,320	216,142	220,033	223,994	228,026	232,130	236,308
TOTAL OPERATING REVENUES	\$ 33,108,081	\$ 34,466,633	\$ 35,881,925	\$ 37,356,421	\$ 38,892,692	\$ 38,682,513	\$ 40,271,812	\$ 41,927,867	\$43,653,577	\$45,451,965
OPERATING AND MAINTENANCE EXPENSES	\$ 10,153,770	\$ 10,523,096	\$ 10,906,078	\$ 11,303,234	\$ 11,715,095	\$ 12,142,215	\$ 12,585,165	\$ 13,044,542	\$13,520,965	\$14,015,076
NET REVENUES	\$ 22,954,311	\$ 23,943,537	\$ 24,975,847	\$ 26,053,187	\$ 27,177,597	\$ 26,540,298	\$ 27,686,647	\$ 28,883,325	\$30,132,612	\$31,436,889
DEBT SERVICE	\$ 16,276,826	\$ 16,276,826	\$ 16,276,826	\$ 16,276,826	\$ 16,276,826	\$ 18,970,709	\$ 18,970,709	\$ 18,970,709	\$18,970,709	\$18,970,709
BALANCE AFTER DEBT SERVICE	\$ 6,677,485	\$ 7,666,711	\$ 8,699,021	\$ 9,776,361	\$ 10,900,771	\$ 7,569,589	\$ 8,715,938	\$ 9,912,616	\$11,161,903	\$12,466,180
NON-OPERATING (REVENUES)/EXPENSES	\$ 7,877,527	\$ 8,280,245	\$ 8,698,033	\$ 9,131,539	\$ 9,581,444	\$ 8,969,682	\$ 9,436,606	\$ 9,921,059	\$10,423,798	\$10,945,615
NET SURPLUS (DEFICIT)	\$ (1,200,042)	\$ (613,534)	\$ 988	\$ 644,822	\$ 1,319,327	\$ (1,400,093)	\$ (720,668)	\$ (8,443)	\$ 738,105	\$ 1,520,565
PERCENT DEFICIENCY	3.999%	1.959%	0.000%	0.000%	0.000%	3.965%	1.956%	0.022%	0.000%	0.000%
RATE INDEXING FOR INFLATION	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%
RATE INCREASE ABOVE INFLATION	5.000%	0.000%	0.000%	0.000%	0.000%	-5.000%	0.000%	0.000%	0.000%	0.000%
TOTAL ANNUAL RATE INCREASE	7.500%	2.500%	2.500%	2.500%	2.500%	-2.500%	2.500%	2.500%	2.500%	2.500%
CUMULATIVE RATE INCREASE	82.000%	84.500%	87.000%	89.500%	92.000%	89.500%	92.000%	94.500%	97.000%	99.500%

In addition to the rate impacts on customers another financial issue to consider is the equity component in the system. Under PSC ownership customer payments accrue to the equity of a utility that is held for the benefit of its shareholders, however under public ownership the payments accrue to a utility that is held for the benefits of the customers it serves. This can be expressed in simple terms as renting versus owning. Over time as debt principal is paid and additions are made the utility increases in value and equity. The PSC ownership scenario is analogous to renting where at the end of the term the customers paying user rates have nothing to show for their payments. Under City ownership the customers gain equity in the system which can be leveraged in the future for their benefit.

At this time purchasing the utility would be advantageous due to the fact that there is a willing seller and the utility has high capital requirements that allow the City to maximize its ability to acquire capital. The acquisition would allow for not only lower rates to customers in the future but would also allow the City to build equity in the utility system.

7.2.2 Formation of Regional Water Authority

The only vehicle available in New Hampshire law for the formation of an entity that can be used to operate a water utility in multiple communities is RSA 53-A. This statute has a number of aspects that make it difficult to use for a permanent utility or public works organization. Under current legislation an entity such as a Merrimack River Regional Water Authority is dependent on the annual funding of the member communities.

An authority is a public entity with an independent legal existence formed to perform a narrowly defined function. It can operate across the boundaries of two or more units of government if so defined in its charter. Once formed, an authority must be able to function independently and rely on the communities that form it for representatives to a governing body which functions as a Board of Directors. An authority needs to have the following characteristics to function as a regional water authority:

1. The ability to adjust the boundaries of its operation.
2. The ability to establish rates for services and to enforce the collection of those rates.
3. The ability to enter into long-term contracts.
4. The ability to borrow against the pledge of its revenue or its real property.
5. With appropriate safeguards, the power of eminent domain.

6. A mechanism for its dissolution and a distribution of its assets upon the completion of its purpose.

There are a number of regional issues besides water that could be addressed by an organization like the authority described above.

7.2.3 Conditions to Merger

The City can take the position that the merger should benefit the ratepayers as well as the stockholders and that Philadelphia Suburban should commit to preserving the watershed and making the necessary capital investments required to insure the future performance of the water system. More specifically those conditions should be that Philadelphia:

1. Limit general corporate overhead charges to the Pennichuck Utilities to no more than 1.25% of water operating revenues.
2. Reduce the equity percent of total capital of the Pennichuck Utilities to 45%.
3. Implement according to Table 3-10 in the following areas:
 - Supply Pond System – Dredge supply pond chain system
 - Watershed Management – Implement the recommendations in the Pennichuck Watershed Management Plan and expand this plan to include the eight additional items presented in Table 4-8
 - Treatment Plant – Replace and/or upgrade the treatment plant
 - Distribution System – Replace and/or upgrade the distribution system
 - Future Regulations – Implement upgrades to treatment plant to comply with future regulations
 - Security – Install improvements to security systems for watershed, treatment plant, distribution system
4. Invest annual capital improvements ranging from \$ 4.5 to \$ 8 million per year based on the plan provided in Table 3-11 and shown in Figure 3.5.
5. Discontinue selling land currently owned by Southwood Corporation.

6. Guarantee a 10 year rate for Pennichuck Water Works customers.
7. Eliminate fire hydrant rental fee within the core system.
8. Eliminate requirement to replace water lines at Nashua's cost.
9. PSC can not supply water to a bottling facility.
10. Bottling facilities within the Pennichuck watershed shall be prohibited.
11. Pennichuck remain a separate corporation as a utility.